Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Petition of Cingular Wireless Requesting	)	WT Docket No. 02-100
Federal Preemption of	)	
Anne Arundel County Ordinance	)	DA 02-1044
Regulating Radio Frequency	)	
Interference	)	

To: Wireless Telecommunications Bureau, Commercial Wireless Division, Policy and Rules Branch

COMMENTS OF
MARK F. HUTCHINS

The undersigned is a radiofrequency ("RF") engineer, certified as a Senior Broadcast Engineer by the Society of Broadcast Engineers since 1977, with many years' experience with Radiofrequency Interference ("RFI"). In addition to RF engineering work for personal wireless service providers, a substantial number of municipalities have utilized my firm's services to evaluate applications for such facilities.

I. The Anne Arundel County Ordinance Interference Certification Requirement is Impractical

The County requires "certification from an independent consultant…that the facility…will not degrade or interfere with the County's public safety communication systems." *See* Article 28 § 10-125(j)(1). Although the undersigned would presumably be well qualified to do perform an RFI – often known as an intermodulation – analysis, it would be difficult or impossible to furnish such a certification. Using sophisticated computer techniques, it is possible to identify intermodulation products from a proposed

installation that are most likely to cause interference to existing facilities at a collocation site. There may be hundreds of RFI possibilities, but no amount of computer effort can precisely ascertain which may prove troublesome. In most collocation facilities, it is not unlikely that emissions from an additional transmitter will cause some degradation to the front-end performance of certain existing receivers. Regarding both interference and degradation, the consideration shouldn't be whether they will happen, but rather how readily they can be mitigated. I submit that it would be unwise for a qualified radiofrequency engineer to *pro forma* certify any collocation site as free of RFI or RF degradation. Nonetheless, intermodulation studies are valuable tools, and a conditional prediction can always be made. Furthermore, RFI from personal wireless facilities is rarely unable to be eliminated or effectively reduced.

II. Municipalities Need Guidelines From The Commission Regarding RFI

The undersigned has direct experience in the Freeman[1] case cited in the Petition. In addition, numerous municipal clients have expressed concern about the possibility of interference, particularly to their own public safety services. Arguably, one message from the Freeman case is that applicant statements may be overly optimistic, and that the municipality may be without recourse if it and its residents experience interference. I submit that this concern may sometimes delay deployment of personal wireless services where collocation is proposed on a municipal tower.

I respectfully request that the Commission remind its licensees to be candid about their obligations regarding RFI in any statements made pursuant to local approvals and

[1] Freeman v. Burlington Broadcasters, Inc., 204 F.3d 311 (2 nd Cir. 2000).

permits. I also suggest furnishing an interference guide for local officials, similar to the Commission's document[2] regarding radiofrequency exposure.

Respectfully submitted,

/s/

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June 10, 2002

[2] FCC and its Local and State Government Advisory Committee, "A Local Government Official's Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance"; June 2, 2000.